

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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100. (canceled)

101. (currently amended) A solid phase microextraction sampling device for collecting a component from an animal or animal tissue, said sampling device comprising:

at least one fibre consisting of a coated end which is at least partially coated with a polymeric extraction phase for extracting said component; and

a positioning device for guiding said coated end into position within a blood vessel of the animal or animal tissue, said positioning device comprising:

a catheter for placement within the blood vessel, through which said fibre extends, said catheter having an open end for positioning within the blood vessel, and said catheter being immobilized during sampling with respect to the blood vessel; and

a fibre holding region attached to the end of the fibre opposite to the coated end of the fibre, said fibre holding region being movable with respect to the catheter, to move said coated end of the fibre into or out of the blood vessel;

wherein said fibre is a flexible wire; and

wherein said extraction phase is loaded with a calibrant prior to sampling.

102. (previously presented) The sampling device of claim 101, wherein the coated end of said fibre is further coated with a polymeric biocompatible protection layer.

103. (previously presented) The sampling device of claim 102, wherein said biocompatible protection layer comprises polypyrrole or derivatised cellulose.

104. (previously presented) The sampling device of claim 101, wherein said extraction phase is a matrix for a MALDI-TOFMS analysis.

105. (canceled)

106. (previously presented) The sampling device of claim 101, wherein said extraction phase contains a fluorescent label or an enzyme.

107. (previously presented) The sampling device of claim 101, further comprising an openable housing for said fibre.

108. (canceled)

109. (previously presented) The sampling device of claim 101, comprising a plurality of said fibres capable of being simultaneously positioned in separate locations in said animal or animal tissue.

110. (canceled)

111. (canceled)

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114. (canceled)

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116. (canceled)

117. (canceled)

118. (previously presented) The sampling device of claim 101, additionally comprising a needle in which said fibre is housed, said needle being insertable into said catheter.

119. (previously presented) The sampling device of claim 101, comprising a plurality of said fibres for positioning at the same location in said animal or animal tissue.

120.(previously presented) The sampling device of claim 101, wherein said extraction phase comprises substituted or unsubstituted poly (dimethylsiloxane), polyacrylate, poly (ethylene glycol), carbon, poly(divinylbenzene) or polypyrrole.

121. (previously presented) The sampling device of claim 101, wherein said polymeric extraction phase additionally comprises a bioaffinity agent selected from the group consisting of a selective cavity, a molecular recognition moiety, a molecularly imprinted polymer and an immobilized antibody.

122. (new) A solid phase microextraction sampling device for collecting a component from an animal or animal tissue, said sampling device comprising:

at least one fibre consisting of a coated end which is at least partially coated with a polymeric extraction phase for extracting said component; and

a positioning device for guiding said coated end into position within a blood vessel of the animal or animal tissue;

wherein said extraction phase is loaded with a calibrant prior to sampling.

123.(new) The sampling device of claim 122, wherein the coated end of said fibre is further coated with a polymeric biocompatible protection layer.

124.(new) The sampling device of claim 123, wherein said biocompatible protection layer comprises polypyrrole or derivatised cellulose.

125.(new) The sampling device of claim 122, wherein said extraction phase is a matrix for a MALDI-TOFMS analysis.

126.(new) The sampling device of claim 122, wherein said extraction phase contains a fluorescent label or an enzyme.

127.(new) The sampling device of claim 122, further comprising an openable housing for said fibre.

128.(new) The sampling device of claim 122, comprising a plurality of said fibres capable of being simultaneously positioned in separate locations in said animal or animal tissue.

129. (new) The sampling device of claim 122, comprising a plurality of said fibres for positioning at the same location in said animal or animal tissue.

130.(new) The sampling device of claim 122, wherein said extraction phase comprises substituted or unsubstituted poly (dimethylsiloxane), polyacrylate, poly (ethylene glycol), carbon, poly(divinylbenzene) or polypyrrole.

131. (new) The sampling device of claim 122, wherein said polymeric extraction phase additionally comprises a bioaffinity agent selected from the group consisting of a selective cavity, a molecular recognition moiety, a molecularly imprinted polymer and an immobilized antibody.

132. (new) The sampling device of claim 101, wherein the coated end is coated with a polymeric extraction phase.

133. (new) The sampling device of claim 122, wherein the coated end is coated with a polymeric extraction phase.